

**Source: Dialog****L-ascorbic acid prodn - from 2-keto-L-gulonic acid (derivs)****Patent Assignee:** TAKEDA CHEM IND LTD**Patent Family**

Patent Number	Kind	Date	Application Number	Kind	Date	Week	Type
JP 73015931	B					197321	B

**Priority Applications (Number Kind Date):** JP 7087371 A (19701005)**Abstract:**

JP 73015931 B

Process comprises reacting diacetone-2-keto-L-gulonic acid hydrate, 2-ketogulonic acid hydrate or 2-keto-L-gulonic acid with a mineral acid in an inert solvent contg. a surfactant to obtain L-ascorbic acid. Reaction is completed within 4-6 hrs. and the yield is almost quantitative, i.e. 94-96%. Surfactant used may be non-ionic surfactant (e.g. polyoxyethylene polyoxypropylene ether, polyoxyethylene alkylaryl ether), cationic surfactant (e.g. quat.ammonium salt, pyridinium salt) or anionic surfactant (e.g. higher fatty acid, alkyl arylsulphonate). Ratio of surfactant may be 0.005-10% wt., pref. 0.1-3.0% wt., to L-ascorbic acid to be produced. HCl, H<sub>2</sub>SO<sub>4</sub>, H<sub>3</sub>PO<sub>4</sub>, etc. may be used as the mineral acid, 30-45% HCl is pref. Inert solvent is e.g. benzene, toluene, xylene, chlorobenzene, CHCl<sub>3</sub>, CCl<sub>4</sub>, ethylenedichloride or tetrachloroethane. When 30-45% HCl is used, 5-15 pts. of the acid are pref. used to 100 pts. of diacetone-2-keto-L-gulonic acid.

Derwent World Patents Index

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Dialog® File Number 351 Accession Number 952845

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WPI Acc No: 1973-30089U/197321

L-ascorbic acid prodn - from 2-keto-L-gulonic acid (derivs)

Patent Assignee: TAKEDA CHEM IND LTD (TAKE ).

Number of Countries: 001 Number of Patents: 001

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Title Terms: ASCORBIC; ACID; PRODUCE; KETO; GULONIC; ACID; DERIVATIVE

## Synthesis of 2-keto-L-gulonic acid and ascorbic acid - WPI Takeda Results

L25 ANSWER 9 OF 23 WPIDS COPYRIGHT 1997 DERWENT INFORMATION LTD

AN 73-30089U [21] WPIDS

TI L-ascorbic acid prodn - from 2-keto-L-gulonic acid (derivs).

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PA (TAKE) TAKEDA CHEM IND LTD

CYC 1

PI JP 48015931 B (7321)\*

PRAI JP 70-87371 701005

AN 73-30089U [21] WPIDS

AB JP73015931 B UPAB: 930831

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